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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/30/2003

Ulf Bodin

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3892

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7590

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EXAMINER

IBRAHIM, MOHAMED

ART UNIT

PAPER NUMBER

2144

MAIL DATE

DELIVERY MODE

06/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/673,323	BODIN ET AL.	
	Examiner	Art Unit	
	Mohamed Ibrahim	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/12/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 7-8 are objected to because of the following informalities:

Claim 7 contains an extra "at" in the phrase 'at least'. There should be a period at end of claim 8 as each claim begins with a capital letter and ends with a period. Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-13 and 16-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 1-13, the claims appear to recite an abstract idea, since the claimed steps do nothing more setup a threshold for each link by choosing the level of threshold, which would amount to only thoughts. The claims do not recite a result of the search which is useful, concrete and tangible nor is there a physical transformation, so as to be available for use in a practical application.

Regarding claims 16-17, the language of claims 16-17 raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

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The applicant(s) claim "a computer program product" but does not define within the body of the claim the hardware in which the invention runs. Thus, absent recitation of the server or some other hardware, claim 16-17 are not limited to a tangible embodiment, instead being sufficiently broad to encompass software, per se as evidenced by paragraph [0098] of the specification for the instant application.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Davies et al. (Davies), U. S. Patent No. 6839767.

Regarding claim 1, Davies discloses a method for performing admission control in order to offer assurances on forwarding quality in networks comprising setting a threshold for each link where said threshold defines a maximum sum of forwarding resources requested by applications for their application data flows, ADFs, on the link (see e.g. fig. 5, col. 5 lines 3-37 and col.10 line 56-col. 11 line 3; a system for assuring admission control quality that utilizes threshold is provided), characterised by choosing the level of said threshold by utilising knowledge about multiplexing properties of the ADFs on each

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link and by utilising knowledge about the forwarding resources of the links (see e.g. col. 9 lines 23-32 and col. 10 lines 7-27; admission controller makes decision on whether or not to forward message from a sender via the link which depend of the bandwidth and flow of data).

Regarding claim 2, Davies discloses the further step of utilising knowledge about the traffic mix of different ADFs on each link when choosing the levels of said thresholds (see e.g. col. 5 line 58-col. 6 line 10).

Regarding claim 3, characterised by estimating multiplexing properties of different ADFs off-line, said estimation being based on results from preparatory tests of recorded samples of ADFs, which are expected on a link and use this estimation when choosing the level of said threshold (see e.g. col. 7 lines 15-38).

Regarding claim 4, Davies discloses using assumptions on user behaviour and application configurations for the estimation (see e.g. col. 7 lines 25-30).

Regarding claim 5, Davies discloses setting an initial threshold for each link and repeatedly, during usage, measuring multiplexing properties of aggregated ADFs online on each link and use these measurements to dynamically adapt said thresholds during usage (see e.g. col. 12 line 51-col. 13 line 4).

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Regarding claim 6, Davies discloses choosing the initial threshold estimating multiplexing properties of different ADFs off-line, said estimation being based on results from preparatory tests of recorded samples of ADFs, which are expected on a link and use this estimation when choosing the level of said threshold (see e.g. col. 7 lines 30-38).

Regarding claim 7, Davies discloses performing the measurements at least two different rates (see e.g. col. 8 lines 34-59).

Regarding claim 8, Davies discloses measuring at a first rate, which is equal to or lower than the amount of allocated resources on the link and measuring at a second rate, which is lower than the first rate (see e.g. col. 11 lines 22-32).

Regarding claim 9, Davies discloses wherein the second rate is dependent on the reserved resources on the link and the threshold (see e.g. col. 8 lines 34-58).

Regarding claim 10, Davies discloses increasing the threshold when both the measurement at the first and second rates indicate lower loss-rates than what is assured (see e.g. col. 11 lines 33-58); decreasing the threshold when both the measurement at the first and second rates indicate higher loss-rates than what is assured; and maintaining the threshold when the measurement at the second rate indicates higher loss-rate than assured and the measurement at the first rate indicates

lower loss-rate than assured (see e.g. col. 12 lines 19-37).

Regarding claim 11, Davies discloses introducing a measurement threshold, which defines a level of forwarding capacity reservations on the link above which the measurements are initiated (see e.g. col. 11 lines 4-21).

Regarding claim 12, Davies discloses increasing the measurement threshold in steps but not over a predefined maximum level which is lower than the level of allocated resources of the link when the measurement at the second rate indicates higher loss-rate than assured and the measurement at the first rate indicates lower loss-rate than assured (see e.g. col. 11 lines 34-58).

Regarding claim 13, Davies discloses measuring at a third rate, which is higher than the first rate but equal to or lower than the allocated resources of the link when the measurement at the first rate indicates a higher loss rate than assured, the loss rate measured at the third rate being indicative of if it is necessary to pre-empt ADFs from the link or if it is enough to prevent new ADFs from entering the link (see e.g. col. 11 lines 33-58 and col. 12 line 51-col. 13 line 4).

Regarding claim 14, the limitations of this claim is substantially the same as that of claim 1 and thus is rejected for the same rationale in the rejection of claim 6.

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Regarding 15, Davies discloses characterised in that it comprises or is connectable to a measuring means adapted to perform measurements on the links (see e.g. col. 12 lines 7-18).

Regarding claims 16-17, the limitations of these claims have already been addressed (see claim 1 and 101 rejection, above).

Regarding claim 18, Davies discloses a node in a network (see e.g. col. 7 lines 153-65; host machine or server or PC), said node comprising admission controlling means (14;14') adapted to perform admission control in order to offer assurances on forwarding quality in networks (see e.g. fig. 1 item 20 and col. 8 line 59-col. 9 line 2; admission controller), said admission controlling means (14;14') comprising threshold setting means (16;16') adapted to set a threshold for each link, said threshold defining a maximum sum of forwarding resources requested by applications for their application data flows (see e.g. fig. 5 and col. 10 line 56-col. 11 line 21; threshold setter), ADFs, on the link, characterised in that said threshold setting means (16;16') further is adapted to utilise knowledge about multiplexing properties of the ADFs on each link and knowledge about forwarding resources of the link when choosing the level of said threshold (see e.g. col. 12 line 51-col. 13 line 4; the forwarding of messages depends of the estimation of the current load of the network resource).

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Regarding claims 19-30, the limitations of these claims are substantially the same as claims 2-13, respectively and thus are rejected for same rationale as their corresponding claims 2-13.

Conclusion

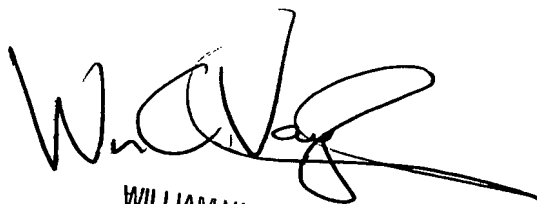
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form PTO-892 (Notice of Reference Cited) for a list of relevant prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Ibrahim whose telephone number is 571-270-1132. The examiner can normally be reached on Monday through Friday from 7:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn, Jr. can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

IMI/ *ms*

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